



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,221	11/15/2005	Paulo Cavalcanti Gomes Ferreira	265833US0X PCT	8194
22850 7590 11/21/2007 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER COLLINS, CYNTHIA E	
			ART UNIT 1638	PAPER NUMBER
			NOTIFICATION DATE 11/21/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/526,221

Applicant(s)

FERREIRA ET AL.

Examiner

Cynthia Collins

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 30-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-24 and 30-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-14, 16-24 and 34-35, drawn to a method comprising increasing by recombinant means expression in a plant or plant part of a cdc27a nucleic acid sequence, a plant, plant part, and a genetic construct.

Group II, claim(s) 1-14, 16-24 and 34-35, drawn to a method comprising decreasing by recombinant means expression in a plant or plant part of a cdc27a nucleic acid sequence, a plant, plant part, and a genetic construct.

Group III, claim(s) 1-14, 16-24 and 34-35, drawn to a method comprising increasing by recombinant means levels in a plant or plant part of a CDC27A protein, a plant, plant part, and a genetic construct.

Group IV, claim(s) 1-14, 16-24 and 34-35, drawn to a method comprising decreasing by recombinant means levels in a plant or plant part of a CDC27A protein, a plant, plant part, and a genetic construct.

Group V, claim(s) 1-14, 16-24 and 34-35, drawn to a method comprising increasing by recombinant means activity in a plant or plant part of a CDC27A protein, a plant, plant part, and a genetic construct.

Group VI, claim(s) 1-14, 16-24 and 34-35, drawn to a method comprising decreasing by recombinant means activity in a plant or plant part of a CDC27A protein, a plant, plant part, and a genetic construct.

Group VII, claim(s) 1-2, 17-20 and 34-35, drawn to a method comprising increasing by chemical means expression in a plant or plant part of a cdc27a nucleic acid sequence.

Group VIII, claim(s) 1-2, 17-20 and 34-35, drawn to a method comprising decreasing by chemical means expression in a plant or plant part of a cdc27a nucleic acid sequence.

Group IX, claim(s) 1-2, 17-20 and 34-35, drawn to a method comprising increasing by chemical means levels in a plant or plant part of a CDC27A protein.

Group X, claim(s) 1-2, 17-20 and 34-35, drawn to a method comprising decreasing by chemical means levels in a plant or plant part of a CDC27A protein.

Group XI, claim(s) 1-2, 17-20 and 34-35, drawn to a method comprising increasing by chemical means activity in a plant or plant part of a CDC27A protein.

Group XII, claim(s) 1-2, 17-20 and 34-35, drawn to a method comprising decreasing by chemical means activity in a plant or plant part of a CDC27A protein.

Group XIII, claim(s) 15, drawn to a method comprising growing a plant with increased expression of a cdc27a nucleic acid sequence.

Group XIV, claim(s) 15, drawn to a method comprising growing a plant with decreased expression of a cdc27a nucleic acid sequence.

Group XV, claim(s) 15, drawn to a method comprising growing a plant with increased levels of a CDC27A protein.

Group XVI, claim(s) 15, drawn to a method comprising growing a plant with decreased levels of a CDC27A protein.

Group XVII, claim(s) 15, drawn to a method comprising growing a plant with increased activity of a CDC27A protein.

Group XVIII, claim(s) 15, drawn to a method comprising growing a plant with decreased activity of a CDC27A protein.

Group XIX, claim(s) 30, 36 and 37, drawn to a food product derived from a plant with increased expression of a cdc27a nucleic acid sequence.

Group XX, claim(s) 30, 36 and 37, drawn to a food product derived from a plant with decreased expression of a cdc27a nucleic acid sequence.

Group XXI, claim(s) 30, 36 and 37, drawn to a food product derived from a plant with increased levels of a CDC27A protein.

Group XXII, claim(s) 30, 36 and 37, drawn to a food product derived from a plant with decreased levels of a CDC27A protein.

Group XXIII, claim(s) 30, 36 and 37, drawn to a food product derived from a plant with increased activity of a CDC27A protein.

Group XXIV, claim(s) 30, 36 and 37, drawn to a food product derived from a plant with decreased activity of a CDC27A protein.

Group XXV, claim(s) 31, drawn to animal feed or food derived from a plant with increased expression of a cdc27a nucleic acid sequence.

Group XXVI, claim(s) 31, drawn to animal feed or food derived from a plant with decreased expression of a cdc27a nucleic acid sequence.

Group XXVII, claim(s) 31, drawn to animal feed or food derived from a plant with increased levels of a CDC27A protein.

Group XXVIII, claim(s) 31, drawn to animal feed or food derived from a plant with decreased levels of a CDC27A protein.

Group XXIX, claim(s) 31, drawn to animal feed or food derived from a plant with increased activity of a CDC27A protein.

Group XXX, claim(s) 31, drawn to animal feed or food derived from a plant with decreased activity of a CDC27A protein.

Group XXXI, claim(s) 32-33, drawn to a method comprising producing one or more enzymes or pharmaceuticals with a plant with increased expression of a cdc27a nucleic acid sequence, and to one or more enzymes or pharmaceuticals produced by said method.

Group XXXII, claim(s) 32-33, drawn to a method comprising producing one or more enzymes or pharmaceuticals with a plant with decreased expression of a cdc27a nucleic acid sequence, and to one or more enzymes or pharmaceuticals produced by said method.

Group XXXIII, claim(s) 32-33, drawn to a method comprising producing one or more enzymes or pharmaceuticals with a plant with increased levels of a CDC27A protein, and to one or more enzymes or pharmaceuticals produced by said method.

Group XXXIV, claim(s) 32-33, drawn to a method comprising producing one or more enzymes or pharmaceuticals with a plant with decreased levels of a CDC27A protein, and to one or more enzymes or pharmaceuticals produced by said method.

Group XXXV, claim(s) 32-33, drawn to a method comprising producing one or more enzymes or pharmaceuticals with a plant with increased activity of a CDC27A protein, and to one or more enzymes or pharmaceuticals produced by said method.

Group XXXVI, claim(s) 32-33, drawn to a method comprising producing one or more enzymes or pharmaceuticals with a plant with decreased activity of a CDC27A protein, and to one or more enzymes or pharmaceuticals produced by said method.

The inventions listed as Groups I-XXXVI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The technical feature linking the inventions of Groups I-XXXVI is increasing or decreasing expression in a plant or plant part of a cdc27a nucleic acid sequence and/or increasing or decreasing levels and/or activity in a plant of a CDC27A protein. However, increasing or decreasing expression in a plant or plant part of a cdc27a nucleic acid sequence and/or increasing or decreasing levels and/or activity in a plant of a CDC27A protein is obvious or anticipated over WO 01/02430 (11 January 2001, Applicant's Search Report), and therefore does not constitute a special technical feature as defined by PCT Rule 13.2, because it does not define a contribution over the prior art.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and

Art Unit: 1638

specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Collins whose telephone number is (571) 272-0794. The examiner can normally be reached on Monday-Friday 8:45 AM -5:15 PM.


Art Unit: 1638

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anne Marie Grunberg can be reached on (571) 272-0975. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cynthia Collins
Primary Examiner
Art Unit 1638

CC


11/17/07